REPORT ON THE BOTANICAL AND FORESTRY DEPARTMENT HONGKONG FOR THE YEAR 1920.

General Remarks.

The first quarter of the year, during which rain fell on 27 days amounting to 4.60 inches, was very favourable for gardening operations.

During the second quarter, rain fell on 57 days amounting to 43.45 inches, this was exceptional and most favourable to the continued planting of forest and roadside trees.

During the third quarter rain fell on 55 days amounting to 59.24 inches.

The last quarter was favourable for gardening operations generally, with the exception of the raising of annual vegetable and flower seedlings, both of which suffered from the heavy rains.

The amount of damage resulting from storms or the proximity of typhoons was fortunately very small.

Gardens and Grounds.

Botanic Gardens.—The annual pruning of shrubs and creepers was commenced in February and large numbers of cuttings from these were put in to propagate young plants for the garden stock and for sale.

All Poinsettias in beds were given a second pruning in June.

The Amaryllis in a bed outside the plant houses, Old Garden, were taken up and replanted after the bed had been well dug and manured. All the other Amaryllis beds were given a dressing of old stable manure.

After the completion of the alteration to the wall at the north-east corner of the Old Garden, several new varieties of Hibiscus were planted to replace those which had been destroyed when this work was in progress during 1919.

Short iron railings were fixed to the top of the stone walls on both sides of the north-west gate of the Old Garden by the Public Works Department.

All the vacant spots in rockeries in both gardens were planted up with ferns and foliage plants in the spring as usual.

Several patches of Blue Grass under trees were repaired, and a bare bank at Upper Glenealy Rockeries was also covered with this useful plant.

All ferns and foliage plants in the plant houses were repotted in February; *Chrysalidocarpus* and *Nephrolepis* in the Loan Plant Compound, and elsewhere in the Botanic Gardens were divided and repotted as usual.

Plants in beds on the lower terrace were renewed with summer or winter annuals as required.

In the second quarter, the following trees, which are being tried for the first time in the Colony, were planted in suitable places in the Old and New Botanic Gardens:—*Bauhinia candicans*, *Thuya plicata*, *Cupressus lusitanica*, *Cupressus macrocarpa*, *Eugenia uniflora*, *Eugenia myrtifolia*, *Gleditschia tricanthos*, and a number of new varieties of Hibiscus raised in Honolulu.

Two young plants of *Rhodoleia Championi*, two of the white-flowered variety of *Bauhinia Variegata*, one of *Punica Granatum* and one of *Zizyphus vulgaris* were also planted.

The trees of *Paulownia Fortunei* flowered very well, but, as during the last two years, a man had to be placed there each day during the early part of the year to drive birds away whilst the buds were opening.

The *Renanthera coccinea*—Spider Orchid—grown in pots about the fountain made a splendid show while in flower in May.

Earth worms in lawns were very troublesome, and dressings of Cha-chai were applied on wet days, this had the effect of bringing most of the large worms to the surface, where they were collected and destroyed.

At the lower entrance to the New Garden, the remaining part of the bamboo hedge, which always became untidy in the winter months, was rooted up and replaced with *Chrysalidocarpus*.

Throughout the whole year, teak labels of the trees, shrubs, &c., in both gardens were renewed as required.

In front of a garden seat on the upper part of the New Garden, a few steps composed of broken green pots and cement were made to give visitors easy access to the seat, and at the same time to prevent further damage to the turf near it.

About the middle of the year, a small and disused plant house near the Macdonnell Road entrance to the Old Garden was taken down and the ground on which it stood as well as the grass bank behind it, was cleared and used for storing pot plants.

Twelve granite slabs obtained from this old house were used as seats in various parts of both gardens.

After heavy rains on June the 11th and 12th a bank at the west end of the palm plot in the New Garden gave way and buried a few Camellias of good varieties. The soil so washed down was packed against the bottom of the remaining portion of the bank to prevent further landslips.

On the slope above the gallery walk and on the bank below the lower entrance to the New Garden, a number of wild trees and shrubs, which might have fallen into Albert Road during a storm, were cut down and removed.

The small-meshed wire netting forming the sides and front of the Deer-pen, which was quite worn out was completely removed and replaced by iron wire sheep netting of a much larger mesh supported by iron posts.

The decomposed granite floor within the enclosure was also re-surfaced.

One big tree of *Poinciana regia* which effectively served for many years as a shade tree for the numerous plants stored in the Loan Plant Compound was blown down and killed by a gale on July the 31st.

All the brick plant stands in the pot nursery near the office and the water channels alongside walks in both gardens were pointed with cement.

There was a great demand for the smaller varieties of Maiden-hair ferns, small flowering trees, shrubs and Bamboo Palms (*Chrysalidocarpus*) during the year, the total number of plants sold being 1,955.

The yearly show of the Hongkong Horticultural Society was held in the Botanic Gardens on March the 4th and 5th and the exhibits of both flowers and vegetables were very good notwithstanding the weather which was very dull for the few days immediately preceding the show.

The attendance at the show on both days was fairly good.

All the young trees in both gardens were retied or re-staked as required before the time when typhoons may be expected.

The Alpinias near the large tree of *Michelia Champaca* in Glenealy which unfortunately always afforded an excellent shelter for bricks and other rubbish dumped by coolies were destroyed and the area planted with Blue Grass, the adjoining white-flowered Pancratiums were taken up and replanted.

All the garden seats, gates, iron fences and summer house were scraped and repainted as usual.

Plant houses in the pot nursery as well as those in the Old Garden were given a coat of white or colour-wash.

As an experiment the Rose bushes in beds in both gardens were not pruned this year, all were given a heavy dressing of old manure.

Owing to the late arrival of seeds from England, the main crops of winter vegetable and flower seeds could not be sown until the end of October instead of at the beginning of that month.

Very little damage was done by "grass caterpillars" this year. The only places which suffered slightly were the lawns on the lower terrace and a few small patches elsewhere in the Old Garden.

The Hibiscus which had been planted to form a boundary hedge along the wall in Garden Road, were again pruned in October.

After a heavy rainstorm on April the 29th, a reptile 42 inches in length was found near the fountain in the old Garden, it was captured and removed to one of the Aviary tanks, and was later identified by Mr. A. H. Crook as a large specimen of the Giant Salamander-*Cryptobranchus maximus*.

Government House Grounds.—Flowering shrubs and foliage plants were given the usual yearly pruning in the first quarter.

The remaining part of the bamboo hedge forming the north boundary was entirely removed and the vacancies refilled with Bamboo Palms (*Chrysalidocarpus*). This hedge has now a fairly clean and neat appearance.

A small rockery on the east side of the main entrance was dispensed with and was replaced by a small earth bank planted with Blue Grass and plants of *Hypericum chinense* and Hydrangea ; the latter are being tried for the first time in these grounds.

The trees of *Erythrina indica* made a fine show when in flower in May.

The interior of the House was decorated with pot plants and hanging baskets of flowers on four occasions during the year.

A similar scheme of decoration without hanging baskets was carried out on the occasion of the visit of H. R. H. the Crown Prince of Rumania.

All the less decorative Cannas in beds were rooted out and replaced by better varieties.

The big trees of Banian (*Ficus retusa*) in front of the House and those near the servants' quarters were pruned in August.

The small bamboo hedge outside the stables was removed, as the plants of Hibiscus, which were planted there about two years ago to take its place, have now formed a more effective and decorative hedge.

The path round the front lawn on the south side and those on the north side of the grounds were re-surfaced with decomposed granite.

A specimen tree of *Cassia nodosa* was planted in a rockery east side of the Guard House at the beginning of the year.

The large irregularly shaped bed of flowering shrubs on the north side of the grounds was removed and the area levelled and turfed.

A small triangular bed near the main entrance was also re-arranged and planted with a more showy selection of flowering plants.

"Grass Caterpillars", which have always been very troublesome on the grass lawns, did not damage the turf so much this year, the lawn on the south side and a small one on the north were attacked but after two light dressings of weak Jeye's Fluid these pests fortunately disappeared.

Mountain Lodge Grounds.—The plants in the large bed below the big retaining wall suffered very much from the effects of wind and fog this year, also the seedling Cosmos, which have always produced a good mass of orange flowers in previous years were a total failure.

All the Cannas in the various beds were taken up, divided and replanted after the ground had been thoroughly manured.

Undergrowth in the valley and elsewhere in the grounds was cleared as usual.

The Blue Grass on areas in front of the house and in centre of the big lawn, where the soil had become sterile, was taken up and replanted in fresh soil.

The tennis lawns were given a dressing of old stable manure in February.

Eleven plants of Allamanda were planted on a slope near the big lawn and four on a hill opposite the main entrance.

Grass lawns, banks and putting greens were regularly cut, rolled and kept in good order generally throughout the year.

A number of flowering shrubs were planted in the bed below the retaining wall to replace those which had been stripped of their leaves by the wind.

Blake Garden.—Patches of Blue Grass damaged during the preceding year were repaired, and the rockery at the north-east entrance was partially replanted.

One tree of *Cupressus macrocarpa*, one *Rhodoleia Championi* and one white-flowered *Bauhinia variegata* were planted in suitable places in the garden.

To prevent coolies carrying loads through the garden, the two upper gates at the east and west ends were kept locked.

Poinsettias, Lagerstroemias, Acalyphas and other flowering shrubs were pruned as usual.

Gates, garden seats and summer houses were scraped and painted.

King's Park.—The young trees planted during the past five years were closely watched, retied and re-staked as required.

Owners of bullocks were on four occasions prosecuted and fined at the Police Court for allowing their animals to graze and damage young trees in the park.

The trees of *Erythrina indica*, which were planted two years ago, have made good progress.

Seedling Mimosa, Lantana and long grass were cut from time to time by gangs of women under the charge of the Parkkeeper, a large proportion of the grass which could be used for feeding cattle, was given to the women in lieu of cash payment.

Colonial Cemetery.—Long grass in various parts of the Cemetery was cut by Gardeners and temporary coolies.

Hibiscus and other flowering or foliage shrubs were pruned as usual, and a large number of young plants propagated for filling up vacant plots next year.

Summer and winter annuals were raised for growing in pots and beds.

All new and a large proportion of the old graves were turfed or planted with Blue Grass as usual.

The matshed which is maintained by the Public Works Department and used by this Department as a propagating house was removed to a spot where it will be less noticeable.

Since the new road at the back of the cemetery has been opened a number of thefts by unlicensed hawkers of the branches of *Biota orientalis* which are sold for medicinal purposes, have taken place, two of the offenders were arrested, one was sentenced to a suitable term of imprisonment, the other unfortunately escaped from the custody of the sexton.

Other Grounds.—Most of the Poinsettias planted some years ago on a bank under the pine trees in the Civil Hospital Grounds are now well established, a few which had died were replaced with young plants.

Earth worms on lawns were a great nuisance, these were treated in the same way as those on lawns in the Botanic Gardens and elsewhere.

At the west end of the upper garden, the bank covered with Blue Grass, which had gone into an untidy state, was entirely replanted.

Seedling annuals were continuously supplied from the Botanic Gardens for use in pots in various parts of the grounds.

At the request and expense of this Department, a 2-inch pipe with hydrant for watering purposes was laid along the edging of the big lawn by the Public Works Department.

Caterpillars, which have regularly damaged the turf in former years, did not make their appearance this year.

The Lunatic Asylum Grounds were put in order after the completion of the building of the additional storey ; fresh plants were added and the remainder re-arranged.

In the Victoria Hospital Grounds, Ficus creepers on walls and elsewhere were clipped as required.

The lawns and grass banks were regularly weeded, cut and rolled.

Grass plots in Peak Garden, Government Pavilions and Villas were cut regularly throughout the summer, and the grounds kept in good order generally.

The new playground for children on the Peak was placed under the charge of this Department in July. The grass plot and banks were cut and a few flowering shrubs planted on the side banks.

The trees planted by this Department on the bank below the Peak School, received frequent inspection and attention.

In connection with the extension of Kowloon British School Grounds, 25 Pine trees were cut down and removed.

Plants on the approach road to the Royal Observatory were pruned ; a few were badly damaged or killed by careless soil-dumping by coolies working on the playground extension.

Two small trees in the Kowloon Children's Playground were removed to make room for the erection of swings, etc.

Long grass and Mimosa seedlings in West End Park were cut as required.

After every match the damaged turf on the Cricket Pitch on the Hongkong Cricket Ground was removed and replaced. The pitch was machined and weeded regularly and was given a dressing of well-rotted stable manure. This work was paid for by the Cricket Club.

Blake Pier was decorated with pot plants and palms on June the 10th on the occasion of the landing of H. R. H. the Crown Prince of Rumania.

In the Albany Nurseries, Cannas and Hedychiums were taken up, divided and replanted after the ground had been well manured.

The iron railings of the Upper Albany Nursery were damaged four times by motor-cars during the year, on each occasion they were put in order at the expense of the car owners.

Sweet Corn, Cucumbers and a few other summer vegetables in the Sukunpo Vegetable Garden, were badly damaged by rains in July, August and September.

The Hibiscus along the boundaries of Sukunpo Recreation Ground were pruned and generally kept in order throughout the year.

Rockeries, Blue Grass patches and other shrubs at the St. John's Cathedral Compound were kept in order and repaired as required.

Grass lawn and banks at the Helena May Institute were cut and the flowering shrubs and creepers there also received constant attention.

The grass plot and the Privet hedge at the Volunteer Parade ground were cut and kept in order throughout the year.

At the Subordinate Officers' Quarters, Breezy Point, the lawns were cut and weeded regularly during the summer months. The turf on the front lawns was repaired at the commencement of the wet season.

In addition to those mentioned, several other small gardens, roadside plots or rockeries under the charge of this Department were regularly inspected and kept in good order throughout the year.

HERBARIUM.

287 specimens were mounted and 236 received during the year were pressed and poisoned.

Duplicate specimens, which are used for exchange purposes, were labelled and filed.

All plant specimens were examined, brushed and poisoned at least once during the year.

Duplicate specimens of Ferns were presented to Mons. H. Heuvrard of 10, Avenue d'Lima, Paris, and 54 specimens of the Kwai Chau plants were received from him.

102 specimens of Australian plants were presented by the Director of Sydney Botanic Gardens.

FORESTRY.

Formation of Pine Tree Plantations.—8,424 one year old pine tree seedlings were planted on the bare hills at Cheung Chau.

Forty pounds of *Pinus Massoniana* seeds were sown on the barest hills at Fanling.

On the lower slopes of the hills at Cheung Chau, about 50 lbs. of *Pinus Massoniana* and a small quantity of American Pine seeds were sown broad-cast.

All grass and earth banks below Taipo and coastal roads, formed by the Public Works Department were thickly sown with *Pinus Massoniana* seeds.

Broad-leaved Trees Planted.—880 broad-leaved trees of various kinds were planted on the hills at Fanling, 250 on Taipo Road, and 1,014 along the coastal road from Chin Wan to Castle Peak.

The trees planted in these areas were chiefly *Casuarina*, *Callistemon*, *Poinciana*, *Erythrina* and *Tristania*.

In addition to these, 85 trees of various kinds were planted in place of those which had died out on the slopes of Fanling Hills, 50 on Fanling Road, 78 on Taipo Road, 19 on Sheung Shui Road, 387 on the Frontier Road, Fanling, 22 on the Cross Road, Fanling, 157 on Lok Ma Chau Road, 141 on Castle Peak Old Road, 212 on the road from Santin to Autau, 234 on the road between Chin Wan and Castle Peak, 76 on Autau Road and 70 on other roads in the New Territories.

Care of Trees in Plantations.—Caterpillars in large numbers appeared on pine trees in Plantations 9A, 9B and 9C near Kowloon City during the months of April, May and June, the total collected and destroyed amounted to about 8 tons in weight.

All the plantations in Hongkong and in the New Territories were closely watched and creepers climbing on trees were cut and removed.

A large number of Pine and other trees growing on Farm and Building Lots sold by the Public Works Department were felled and removed.

In connection with road alterations and improvements a number of fine specimens of Banian and other shade trees had to be sacrificed.

Several hundreds of dead trees were cut down and removed from various plantations in Hongkong and Kowloon.

A number of large Banian trees were felled and removed from the parade ground at Police Headquarters at the request of the Captain Superintendent of Police.

In the Shaukiwan District, villagers continue to give a lot of trouble by cutting down trees and lopping off branches in the plantations behind the village.

The Forest Guards made numerous arrests and obtained convictions in most of the cases.

Protection from Fire.—About 19 miles of old fire barriers were cleared in Kowloon, 16 miles in Hongkong and 5 miles at Fanling.

A new barrier about 1,600 feet long was made in the new pine plantations on the hills near Fanling.

Thirty-eight fires were reported during the first quarter, 6 in the second, none in the third and 3 in the fourth, making a total of 47 for the year compared with 44 in the previous year.

A serious fire occurred in Plantation 1G, Wanchai Gap on 22nd January, but in consequence of the information promptly given to this Department by the Police not more than 100 Pines were destroyed.

The Tsing Ming Festival was on the 5th April, and only two small fires were reported on that day.

At the Chung Yeung Festival, on the 20th October, only one small grass fire in a Pine Plantation was reported.

Many times during the year Officers in charge of Police Stations gave very valuable assistance by promptly engaging large gangs of coolies to beat out forest fires in many parts of the Colony.

The thanks of the Department are due to the Honourable the Secretary for Chinese Affairs for lending District Watchmen to assist in watching for fires at the spring and autumn festivals.

Forest Guards' Service.—The total number of persons proceeded against for committing forestry offences was 465 against 447 in 1919.

Of these 410 were convicted, 27 dismissed with a caution, 15 without, 10 had their bail estreated, 1 was required to find a personal bond, 1 was birched and the case against one withdrawn.

Particulars of the cases are given in Tables II and III.

Several contractors had various sums amounting to $280, deducted from their securities as compensation for damage done to growing trees in the vicinity of their workmen's matsheds.

Planting and Care of Roadside Trees.—On the new road between Morrison Hill and Bowen Road, 310 flowering trees and shrubs were planted.

From Stanley to Tytam Road, 906 flowering trees and shrubs of various kinds were put in on both sides of the road.

Forty-three trees and shrubs, and 4 Chinese Palms were planted near the Cattle Depôt, Kennedy Town.

On either side of the new road adjoining Repulse Bay, 251 plants of various kinds were put in.

Trees on the route of the electric tramway and those near the different telephone lines were pruned back to prevent their branches coming in contact with trams or wires.

Miscellaneous Planting.—The forester who is now permanently stationed at Cheung Chau has been able to prevent most of the illicit cutting of wild and planted trees there.

All the trees are doing well and have much improved the appearance of the island.

Many of the residents have from time to time expressed their appreciation of the tree planting scheme which is now being carried out.

Fifty-seven *Bauhinia variegata*, 60 Albizzia and 10 Erythrina were planted on the roadsides between Shaukiwan and Tytam New Road.

On the slopes near Hung Hom Police Station, 24 Hibiscus, 19 clumps of Russelia and 6 Mussaendas were planted.

In Fanling Road, 6 *Albizzia procera*, 12 *Bauhinia Blakeana* and 180 Ficus creepers were planted.

Six *Bauhinia variegata* and 45 Hibiscus bushes were planted at the east end of Kennedy Road.

About 120 feet of bamboo were planted round a septic tank below the old road at Repulse Bay.

At the Bowen Road Tram Station, a small plot was planted with Blue Grass and 7 Bamboo Palms (Chrysalidocarpus).

Forty-five feet of bamboo were planted around a latrine at Barker Road Tram Station.

Eighty flowering shrubs and 106 Ficus creepers were planted on Crown Land at Wanchai Gap at the expense of a building contractor who had damaged the wild trees and shrubs there.

Around the Military Cemetery, Stanley, 32 Aleurites and 4 Banian cuttings were planted.

On a plot by the side of Chatham Road, Kowloon, 72 Hibiscus were planted.

Forestry Service Paths.—These paths which were originally made for the use of Forest Guards were all repaired at the end of the year.

Clearing Undergrowth around Houses.—About 5,504,160 square feet were cleared in various parts of the Colony in connection with anti-malarial measures.

At Mount Davis an area of 118,125 square feet of Crown Land was cleared by the Military Authorities under the supervision of a forester.

Clearing for Survey Purposes.—4,393,120 square feet of undergrowth were cleared for the Public Works Department in connection with the formation of new roads.

Forestry Licences, New Territories.—The total amount of fees collected amounted to $4,926.47 compared with $4,881.11 in 1919.

Nurseries, Agriculture, &c.

Beacon Hill Nursery.—15 lbs. of *Pinus Massoniana* and 11 lbs. of American Pine tree seeds were sown in beds to raise young trees for use in forming plantations in 1921.

In the same nursery, seeds of *Cupressus macrocarpa*, *Pinus radiata*, *Pinus echinata*, *Pinus ponderosa sepulorum*, *Poinciana regia*, *Glyptostrobus heterophyllus*, *Bischofia javanica*, Callistemon, Aleurites and Camphor were sown.

At the Fanling Economic Garden seedling tobacco plants were raised and a large area planted with the varieties known as "Broad Leaved", "Nan Yang" and "Manila".

The resulting crop was good but suffered badly from the effect of the heavy early rains.

The spineless leaved variety of Pineapple fruited well up to the end of October.

The improved variety of Papaya produced some very fine fruits of excellent flavour.

The annual crop of Onions grown from seed obtained from Teneriffe was again very good, the local vegetable growers displayed great interest in this crop and a number applied for the small quantity of seed which is distributed free of charge.

Four hundred pounds of Pine tree seed were collected for sowing in various parts of the New Territories during 1921.

In order to stimulate interest in the growing of Camphor trees, permits to remove leaves and twigs from the trees on Crown Land for use in Camphor distillation were given to two persons, one at Ho Chung, Sai Kung District and the other at Aberdeen.

The work was carried on under the supervision of a Forest Guard and the result was very satisfactory.

The distillation was carried on in proximity of the Camphor trees by means of the ordinary Chinese still composed of two metal boilers and a barrel.

A good grade of Camphor was produced from leaves and twigs which were boiled for not more than 30 minutes, the small quantities which the holders of permits were allowed to make found a ready sale in the local market.

All bulbs of *Narcissus Tazetta* (Chinese New Year Flower) for export to America were again examined and certified by an officer of this Department.

The bulbs were said to be grown at Chang Chow Fu in Fokien Province and are now all brought down to Hongkong for inspection in order to comply with the requirements of the United States of America Government Regulations governing live plants.

Between July the 16th and October the 28th, 3,536 cases in 73 lots containing 482,110 bulbs were examined and passed. The number of bulbs inspected was double that of the preceding year.

Owing to the long continuous, wet summer, almost all the bulbs were infected with a common fungoid disease. Before the bulbs could be passed for export, the firms dealing in them were required to clean and dry the infected bulbs in the sun for some hours.

A number of the inspections were carried out on board the ships which brought the bulbs to Hongkong so that the work of transhipment might not be impeded.

By the instruction of His Excellency the Governor, a large quantity of seed of "Jak" Fruit (*Artocarpus integrifolia*) from the two specimen trees in the Old and New Gardens was collected from the largest fruits and sown.

The whole of the seeds germinated and about 500 young plants were raised for planting on the island and in the New Territories.

Hay Fever.

The removal of the flowers of the common Privet, *Ligustrum sinense* has now become part of the regular programme of the Department.

The pollen from the flower of this plant, which is very readily carried by the wind, is said to be the chief cause of "Hay Fever".

All the flowers were removed from plants in the vicinity of houses and in many cases whole plants were destroyed.

Exchange of Seeds, &c.

The Department is indebted to the following donors of seeds, plants and Herbarium Specimens:—Royal Botanic Gardens, Kew; Director, Botanic Gardens, Sydney; Honourable Mr. A. G. M. Fletcher; Miss Loureiro; Messrs. A. Mackenzie, Cheung Chau; J. Cavalerie, Kwai Chau; Chung King Pui; A. Grove, Kentons, near Henley-on-Thames; L. N. Leefe; C. Edgcumbe; Henry Humphreys; E. A. Irving; A. Nicol; and the Captain Superintendent of Police.

A Handbook of Tropical Gardening and Planting by H. F. Macmillan was presented by His Excellency the Governor.

The following were the principal recipients:—Director, Department of Agriculture, Salisbury (Rhodesia), South Africa; Director, Botanic Gardens, Singapore; Director, Horticultural Section, El Giza, Mudiriya, Egpyt; Sir Edmund Giles Loder, Bart., Leonardslee, Horsham, Sussex, England; Dr. W. M. Docters Van Leeuwen, Director of the Botanic Gardens, Java; Messrs. Howard Spence, Eskdale, Knutsford, Cheshire, England; G. J. Pierce, Department of Botany, Stanford University, California, U.S.A.; Walter T. Swingle, Department of Agriculture, Washington, U.S.A.; H. Heuvrarb, 10, Avenue d' Lima,

Paris, France ; Sergeant Kerr ; Kowloon, Hung Hom and Taipo Police Stations ; Yaumati District School ; Royal Hongkong Golf Club ; Commander Beckwith, R. N.; Honorary Secretary, Peak Club ; Mrs. Gompertz ; Inspector Blackman ; Messrs. Henry Humphreys ; A. E. Wood, Taipo ; E. F. Hill ; W. Fitz Gibbon ; G. P. de Martin ; Ho Kom Tong, and T. H. King.

STAFF.

I greatly regret to have to record the death of the Superintendent Mr. W. J. Tutcher, which took place on the night of April 5th.

The late Mr. Tutcher was seriously ill with pneumonia during January, but apparently recovered and resumed duty on March 15th, a few days later he had a relapse which resulted in his death.

The Assistant Superintendent resumed duty on January the 26th.

The Assistant Head Forester Mr. Ng Kam-shing resigned at the end of May and Mr. Lam Kun-yau was appointed to fill the vacancy on August the 3rd.

H. GREEN,
Superintendent.

June, 1921.

Table I.

RAINFALL, 1920.

Botanic Gardens.

Date.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	inch.	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*
1,	...	.02	...	...	.84	1.58	.08	3.08	...	...	...	...
2,	...	.26	...	...	.17	.70	2.20	...	...	...	...	.06
3,	...	...	.37	...	...	.61	1.38	.11	...	.45	...	...
4,	...	...	.04	...	.21	...	1.83	2.50	...	...	...	.11
5,	...	.10	...	.05	1.82	...	.39	.07	...	...	...	.03
6,	...	...	...	1.17	1.34	...	.09	...	.02	.65	.07	.01
7,	...	...	...	.52	.37	...	...	...	2.27	3.10	...	.05
8,	...	.10	...	...	.25	...	...	...	.62	.91	.16	...
9,	...	...	...	...	...	.06	.01	.07	.60	.18	...	...
10,	...	.02	...	...	.71	2.00	.55	...	.25	.07	...	...
11,	...	.12	.02	...	.72	2.46	.61	1.90	.75	...	1.39	...
12,	...	...	.19	.81	...	4.80	.02	.32	3.65	1.86	.09	...
13,	...	.02	.62	.03	1.23	2.55	...	.21	5.10	.95	...	.05
14,	...	.62	.03	...	.12	.58	.47	.08	.55	...	...	...
15,	...	.98	.13	.13	...	.28	...	...	.03	...	...	...
16,	...	.02	...	.48	...	...	...	...	...	...	...	...

Table I,—*Continued.*

Date.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	inch.	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*	*inch.*
17,	...	.11	...	...	.10	.01	...	.45	...	...	.03	.09
18,	...	.30	...	1.20	...	.41	...	.78	...	.18	5.05	.09
19,	...	.10	...	...	...	.18	3.60	.61	...	.31	.08	.07
20,	...	.07	...	.06	...	.01	10.33	...	.02	...	...	...
21,	...	.13	...	.96	...	.02	2.12	...	.05	...	...	.06
22,	...	.10	...	...	...	...	.16	...	.38	...	.01	...
23,	...	...	...	...	.61	.18	.12	...	1.89	...	.01	...
24,	...	...	...	.02	.10	.25	...	...	.04	...	...	...
25,	...	...	...	.12	1.25	.47	...	1.05	...	...	.02	...
26,	...	...	...	1.93	...	.46	.02	2.47	...	...	...	...
27,	...	...	.01	.03	1.44	...	.15	.45	1.00	...	...	...
28,	...	.03	...	.03	1.20	.27	...	.21	...	...	...	...
29,	...	...	...	...	2.45	...	...	.16	...	...	.20	...
30,	...	...	.02	.33	.27	.02	.10	.20	...	...	.05	.28
31,	...	...	.07	...	2.48	...	3.05	.02	...	...	...	.02
Total,	...	3.10	1.50	7.87	17.68	17.90	27.28	14.74	17.22	8.66	7.16	.92

Total for the year 124.03 inches. Average for the last ten years at the Botanic Gardens—88.20 inches.
Total rainfall registered at the Hongkong Observatory for the year—107.88 inches.

Table II.

FOREST GUARDS' SERVICE: OFFENCES.

Village or District.	Block.	Compartment.	Report of														
			Pine trees stealing.	Pine tree branches stealing.	Pine tree needles stealing.	Brush-wood stealing.	Grass cutting.	Wild flowers stealing.	Wild fruits stealing.	Cattle grazing in plantation.	Earth cutting in plantations.	Fern stealing.	Setting fire to plantation.	Assault on Forest Guard.	Imperson-ating Forest Guard.	Releasing prisoner from custody of Forest Guard.
Victoria,	1	A.B.E.D.G.	6	7	...	45	7	10	...	...	1	...	...	...	...	...
Wongneichong,	2	A.B.C.D.E.F.G.	7	2	2	23	8	5	...	...	...	...	...	...	...	2
Shaukiwan,	3	A.B.C.D.E.F.	16	28	1	60	19	1	...	1	...	1	...	...	...	...
Tytam,	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Stanley,	5	A.B.D.E.F.	2	3	...	14	1	...	...	...	...	...	...	...	...	...
Aberdeen,	6	A.B.C.D.E.F.	11	8	2	44	6	2	...	1	...	...	...	...	...	...
Pokfulam,	7	B.C.D.E.F.G.	5	1	...	11	2	6	1	3	...	...	...	...	...	...
Kowloon,	8	A.B.C.	3	...	1	3	1	...	...	1	...	...	...	...	...	...
Harbour Belt,	9	A.B.C.	6	22	11	6	5	4	...	1	...	...	...	...	...	...
Cheungshawan,	10	...	...	...	...	2	...	1	...	...	...	1	...	...	...	...
Kanghau,	11	...	2	...	...	2	...	...	...	...	...	...	...	...	...	...
New Territories,	12	...	2	2	...	6	8	...	...	...	...	...	...	...	...	...
		Total for 1920,	60	73	17	216	57	29	1	7	1	2	...	...	...	2
		Total for 1919,	59	86	28	153	79	19	5	7	2	...	5	3	1	...

Table III.

POLICE COURT RESULTS.

Cases.	*1920.*	*1919.*
50 cents to $1 fine,	103	89
$1.50 to $2 „	68	43
$2.50 to $3 „	11	27
$4 to $5 „	25	32
$6 to $10 „	16	9
$11 to $25 „	5	3
$120 „	1	—
1 to 4 days' imprisonment,	57	36
5 to 7 „ „	69	63
8 to 14 „ „	44	39
3 weeks' „	2	8
4 „ „	1	—
1 month's „	7	2
5 weeks' „	—	1
6 „ „	1	1
Discharges,	15	27
Cautions,	27	53
Forfeiture of Bail,	10	12
Personal Bond,	1	1
Strokes with the birch,	1	1
Withdrawal,	1	—
Total,	465	447

Table IV.

NURSERIES.

Locality.	*Expenses.*
Kowloon Tsai,	$476.00
Fanling,	360.00
East Point,	65.00
Total,	$901.00

Table V.

REVENUE.

Revenue.	1920.	1919.
	$ c.	$ c.
Timber Sales,	1,891.42	1,835.11
Sale of Plants,	682.10	729.75
Loan of Plants,	405.72	340.44
Forestry Licences,	4,926.47	4,881.11
Inspection of Nursery Stock,	610.00	490.00
Interest on Current Accounts,	5.62	7.86
Miscellaneous Receipts,	15.77	9.25
Fine Fund,	10.66	14.25
	$8,547.76	$8,307.77

Table VI.

Comparative Statement of Revenue and Expenditure for the years 1911-1920.

Years.	Total Expenditure.	Total Revenue.	% of Revenue to Expenditure.
	$ c.	$ c.	%
1911	45,750.85	7,769,82	16.98
1912	39,865.18	2,304.91	5.78
1913	48,745.88	8,352.06	17.13
1914	49,095.97	6,934.21	14.12
1915	49,404.56	6.871.67	13.19
1916	47,325.89	7,034.67	14.86
1917	51,253.82	7,294.49	14.23
1918	51,967.08	6,282.45	12.09
1919	51,457.65	8,307.77	16.16
1920	55,975.49	8,547.76	15.27